

Abstract of the invention

The pattern defect inspection apparatus and its method of the present invention comprises: a recipe setting unit for setting an inspection recipe and/or a review recipe; an illumination optical system including: a laser light source for emitting ultraviolet laser light; a quantity-of-light adjusting unit for adjusting a quantity of the ultraviolet laser light emitted from the laser light source; and an illumination range forming unit for forming on a sample an illumination range of the ultraviolet laser light; a coherence reducing system; and a detection optical system including: a condensing optical system; a diffracted-light control optical system; and a detecting unit.